

### **REMARKS**

By this amendment, no claims have been amended, cancelled, or added. Hence, Claims 1 and 3-10 are pending in the application.

### **WITHDRAWAL OF FINAL REJECTION REQUESTED**

MPEP § 706.07(d) provides for an Examiner to withdrawal the finality of an Office Action when issuance of a final Office Action is premature. In the Final Office Action mailed December 2, 2005, no explanation was provided as to why the cited art allegedly suggests Claims 3 and 5. Thus, no arguments have been presented on the record as to why Claims 3 and 5, as they are currently recited, are not patentable. While the final Office Action stated that Claims 3 and 5 have been rejected based on *Carruthers* for allegedly being obvious, Applicants have not been afforded the opportunity to assess the Patent Office's rationale as to why Claims 3 and 5 are allegedly obvious in view of *Carruthers*. Consequently, it is respectfully submitted that the finality of the rejection is premature, and the Applicants respectfully request that the finality of the Office Action of December 2, 2005 be withdrawn.

### **INTERVIEW SUMMARY**

The Applicant thanks the Examiner for the Interview conducted on January 30, 2006. The interview was between Examiner Carlson and the Applicants' Attorney, Christopher J. Brokaw. Pending Claim 1 that was rejected in the Office Action was discussed along with U.S. Patent Applicant No. 2002/0128904 issued to Carruthers et al. ("*Carruthers*"). No agreement was reached.

## **THE UTILITY REQUIREMENT OF 35 U.S.C. § 101**

Claims 1 and 3-10 were rejected under 35 U.S.C. § 101 because allegedly they do not set forth a useful result. The Office Action states:

because claim 1 does not necessarily require the instructions to be executed, the claim is not taken to positively set forth a useful result. Mere sending, receiving and/or storing of these instructions does not accomplish a useful result. In this case, execution of the claimed instructions would however set forth a useful, concrete and tangible result.

This basis for this rejection is generally referred to as the “utility requirement” of 35 U.S.C. § 101. With respect to the “utility” requirement of 35 U.S.C. § 101, Chisum states that an invention must “meet three tests. First, it must be operable and capable of use. It must operate to perform the functions and secure the result intended. Second, it must achieve some minimum human purpose. Third, it must achieve a human purpose that is not illegal, immoral or contrary to public policy.”

## **THE CLAIMS SATISFY THE UTILITY REQUIREMENT OF 35 U.S.C. § 101**

This rejection appears to be based on the assertion that the invention recited in Claim 1 does not satisfy the second of the three tests. Namely, that sending, receiving and/or storing of the instructions described in Claim 1 does not “achieve some minimum human purpose”.

While questioning the utility of “sending, receiving and/or storing of the instructions described in Claim 1”, the Office Action acknowledges that execution of the claimed instructions would accomplish a useful, concrete and tangible result. This acknowledgement, while correct, is in direct contradiction to the assertion that sending, receiving and/or storing the instructions does not achieve some minimum human purpose.

**SENDING/RECEIVING INSTRUCTIONS ACCOMPLISHES THE USEFUL  
RESULT OF ENABLING THE RECIPIENT TO EXECUTE THE INSTRUCTIONS  
AND THEREBY PERFORM THE CLAIMED OPERATIONS**

Anyone skilled in the art would know that obtaining the claimed instructions is a prerequisite of executing the claimed instructions. A computing device cannot execute instructions that it does not possess. Thus, in order to execute instructions, an entity must first obtain the instructions. An entity may obtain instructions by receiving the instructions from another entity that is sending the instructions.

Logic dictates that it must be useful to perform an operation that is a prerequisite to achieving a useful result. Executing the instructions achieves a useful result, sending/receiving the instructions are a prerequisite to executing the instructions.

By a first entity sending the claimed instructions to a second entity, the first entity is enabling the second entity to subsequently execute the claimed instructions. In this way, sending and receiving the claimed instructions are useful because these acts enable an entity to execute the claimed instructions, which is acknowledged to be useful.

**THE REAL WORLD CONFIRMS THAT SENDING/RECEIVING INSTRUCTIONS  
ACCOMPLISHES A USEFUL RESULT**

The usefulness of enabling a computing device to execute instructions by sending/receiving instructions to the computing device is not merely theoretical. In the real world, tens of thousands (or hundreds of thousands) of people pay for the ability to download software. They are willing to pay for such downloads because they consider it important to enable their computers to execute the software they are downloading. Note that they are not

paying for the execution of the instructions (although that is usually their ultimate intent) but for the transmission (sending/receiving) of the instructions from one computing device to another.

**SENDING/RECEIVING INSTRUCTIONS IS USEFUL FOR THE SAME REASON  
THAT THE SUBJECT MATTER OF A “BEAUREGARD CLAIM” IS USEFUL**

The patentability of claims to “computer-readable media” that store instructions for performing an inventive process has long been recognized. Such claims, often referred to as CRM claims or “Beauregard claims,” are directed to the media that stores such instructions, and not to the execution of the instructions. The utility of the subject matter of such claims hinges on the fact that access to such media enables a computer system to perform an inventive process.

Thus, sending/receiving instructions, and computer-readable media that store instructions, are both useful for the same reason. Namely, both are useful because they enable a computing device to ultimately execute the instructions. It would be logically inconsistent to hold sending/receiving computer instructions to lack utility, while recognizing the utility of computer-readable media.

**STORING INSTRUCTIONS ON A COMPUTER-READABLE MEDIUM  
ACCOMPLISHES A USEFUL RESULT**

As mentioned above, the patentability of claims to “computer-readable media” that store instructions for performing an inventive process has long been recognized. If such media are considered useful, then how can creating such media not be useful? Specifically, computer-readable media that store instructions for performing an inventive process are

created by the act of storing instructions on a computer-readable media. It simply does not make any sense to say that X is useful, but making X is not useful.

Further, all of the reasons give above relative to sending/receiving also apply to “storing.” Storing instructions (whether it be on disk, in volatile memory, or on punch cards) is a prerequisite to executing the instructions. Therefore, storing instructions accomplishes the very useful result of creating a computer-readable medium that can be read by a computing device to allow the computing device to execute the instructions.

### **ACKNOWLEDGING THE UTILITY OF CLAIMS 1 AND 3-10 WOULD BE GOOD POLICY**

The utility of sending/receiving/storing of instructions for performing an inventive process has been explained above. Thus, from technical, legal, and practical perspectives, Claims 1 and 3-10 satisfy the utility requirement. In addition, it would simply be good policy for the U.S. Patent and Trademark Office to acknowledging that claims having the format of Claims 1 and 3-10 satisfy the utility requirement.

Acknowledging the utility of claims having the format of Claims 1 and 3-10 would be good policy because numerous patent applications having that exact format have been or will soon be issued by the Patent Office. To allow the format in some cases, while rejecting it in others, produces uncertainty and inconsistency that serves neither the PTO, the applicants, nor the public.

Acknowledging the utility of claims having the format of Claims 1 and 3-10 would also be good policy because the format of Claims 1 and 3-10 reduces “claim form proliferation.” Claim form proliferation refers to the practice of filing multiple sets of virtually identical claims, where the claims only differ in form. For example, in a typical case

involving software inventions, it is not uncommon for there to be method claims, CRM claims, apparatus claims and system claims, all of which have different preambles but identical limitations. This practice is wasteful, both of the PTO's time and the Applicant's time and money. The format of Claims 1 and 3-10 attempts to reduce the number of claim types required to effectively protect a software-type invention. Claim formats aimed at reducing the need for redundant claim sets should be encouraged, rather than discouraged, by the Patent Office.

For all of the reasons specified above, it is respectfully requested that the rejection of Claims 1 and 3-10 under 35 U.S.C. § 101 be withdrawn.

#### **THE PENDING CLAIMS ARE PATENTABLE OVER THE CITED ART**

Claims 1 and 3-10 are rejected under 35 U.S.C. § 103(a) for allegedly being obvious in view of *Carruthers*. However, each pending claim features one or more elements that are not disclosed, taught, or suggested by *Carruthers*.

#### **CLAIM 1**

Claim 1 recites,

A method for determining which advertisements to include with electronic content delivered to users over a network, wherein the method comprises performing a machine-executed operation involving instructions, wherein the machine-executed operation is at least one of:

- A) sending said instructions over transmission media;
- B) receiving said instructions over transmission media;
- C) storing said instructions onto a machine-readable storage medium; and
- D) executing the instructions;

wherein said instructions are instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

**storing sequence information that indicates a sequence for a plurality of advertisements, wherein each of said plurality of advertisements is associated with corresponding delivery criteria;**  
receiving a request to provide over said network a piece of electronic content that includes a slot for an advertisement;  
comparing slot attributes of said slot with delivery criteria of said advertisements to determine a subset of said plurality of advertisements which qualify for inclusion in said slot; and  
**from said subset of advertisements, selecting an advertisement to include in the slot based, at least in part, on relative positions, within said sequence, of the advertisements in said subset,**  
**wherein each advertisement of said plurality of advertisements has a corresponding delivery obligation, and**  
**wherein the relative position of advertisements in said sequence corresponds to when the corresponding delivery obligation was incurred. (emphasis added)**

At least the above-bolded elements of Claim 1 are not disclosed, taught, or suggested by *Carruthers*.

Applicants concede that at a high level, both the pending claims and *Carruthers* are directed towards placing advertisements in requested content. It is also acknowledged that the axiom of “know thy audience” was well recognized by advertisers, who were more likely to advertise beer during a football game than during a Saturday morning cartoon, and likewise were more likely to advertise a children’s toy during a Saturday morning cartoon than during a football game. However, beyond these sparse generalities, there is little in common between the pending claims and the approach of *Carruthers*.

### **The approach of Claim 1**

The approach of Claim 1 is directed towards the process of selecting which advertisements to include in content. The approach of Claim 1 features numerous advantages over prior approaches. For example, as explained in the Applicants’ specification (See pages

1-6), a prior approach, entitled the most-behind-first approach, for selecting which advertisements to include in content may lead to perceived or actual unfairness since an advertiser could contract for a higher delivery obligation than the advertiser actually desires. In such a case, an advertiser who contracts for a higher delivery obligation than the advertiser actually desires may cause advertisements of advertisers who contracted earlier, but with more realistic delivery obligations, to cease to be selected for inclusion within content.

Advantageously, the approach of Claim 1 overcomes this disadvantage, as well as other disadvantages, by storing sequence information that indicates a sequence for a plurality of advertisements. For example, the sequence may reflect the relative times at which the provider incurred the delivery obligations associated with the advertisements. After the sequence has been established, the position of advertisements within the sequence is used as one of the factors for determining which advertisement to place in a slot, where advertisements nearer the beginning of the sequence (advertisements with earlier-incurred delivery obligations) are favored over advertisements that are nearer the end of the sequence (advertisements with later-incurred delivery obligations).

#### **What Carruthers teaches**

*Carruthers* teaches a system where Capacity Forecaster 52 is used to determine a probable or expected supply of screen real estate on user client devices. Capacity Forecaster 52 may thus be used when a new contract with an advertiser is under consideration by a deliverer of advertisements. If an adequate supply of screen real estate is expected for the proposed advertising campaign, the contract is accepted. If an adequate supply of screen real estate is not expected for the proposed advertising campaign, the advertiser is given an opportunity to relax his or her proposed contractual constraints, thereby making it more likely



that Capacity Forecaster 52 will subsequently indicate that an adequate supply of screen real estate is expected for the revised advertising campaign. Capacity Forecaster 52 is only used to determine whether to accept a proposal for an advertising campaign; Capacity Forecaster 52 is not used to determine a sequence in which advertisements should be delivered to viewers (See paragraph 28-30).

Once a contract for an advertising campaign is accepted by a deliverer of advertisements, Inventory Manager 54 generates a master list of scheduled advertisements based on calculated goals of each active advertising campaign (paragraph 34). Delivery Manager 54 may reorder or reprioritize the master list of scheduled advertisements based on whether daily goals are met (paragraph 35). Delivery Manager 54 delivers the master list of scheduled advertisements, and the advertisements themselves, to an On-Demand Scheduler 70 residing at each ISP POP server (paragraphs 34-37). On-Demand Scheduler 70 determines which advertisements a subscriber is eligible to receive and delivers advertisements in accordance with the master list of scheduled advertisements generated by the Delivery Manager 54 (paragraph 39).

*Carruthers* discloses that the order in which advertisements should be sent to subscribers should be “based preferably both upon priority and some weighting mechanism that indicates how many impressions are needed by each campaign (paragraph 34, lines 8-10). Importantly, *Carruthers* makes clear that the order in which advertisements are to be displayed is not based on when a delivery obligation was incurred. In sharp contrast, the prioritized master list of scheduled advertisements is based on the calculated goals of each of the active advertising campaigns (see paragraph 34). After the Inventory Manager of *Carruthers* generates the prioritized master list of scheduled advertisements based on the

goals of each of the active advertising campaigns, the prioritized master list may be reordered based upon whether daily goals are met. For example, paragraph 35 of *Carruthers* states:

The Delivery Manager 54 can reorder or reprioritize the master list of scheduled advertisements based upon delivery feedback data and queuing logic/algorithms. For example, if the goal for a given campaign is to evenly distribute an advertisement over the course of the campaign length, the advertisements can be moved down in the queue of advertisements to be displayed if it gets ahead of its daily goals. Similarly, if an advertisement gets behind in meeting its goals, it may be automatically promoted in priority. If an advertisement exceeds its daily goals it can be effectively shut off by being placed at the very end of the queue. (emphasis added)

Thus, if a particular advertisement is behind in its daily goals, it will be promoted in priority (see paragraph 54, quoted above). Such an approach suffers from the same disadvantages discussed in Applicants' background. For example, paragraphs 15-16 of the Applicants' background state:

One way of using a behindness measure to select the advertisements that are competing for a slot involves always selecting the qualifying advertisement with the highest behindness value. By selecting the qualifying advertisement with the highest behindness value, the provider ensures that approximately the same percentage of every order is satisfied during a shortfall situation.

Unfortunately, the most-behind-first approach has some significant disadvantages that may lead to perceived or actual unfairness. For example, an advertiser may be interested in advertising in slots that are already subject to several pre-existing obligations. If the advertiser becomes aware of the pre-existing obligations, the advertiser may contract for a much higher delivery obligation than the advertiser actually desires. The consequences of such a contract could be to significantly reduce the number of slots assigned to the previously contracted advertisers, while potentially given the latecomer advertiser exactly the number of slots the advertiser actually desires.

*Carruthers* use of Capacity Forecaster 52 may make it less likely that an advertiser could contract for more advertisements that can be accommodated by the deliverer of advertisements. However, in *Carruthers*, once a contract is accepted, the list of scheduled advertisements is based on the daily goals of meeting the requirements of the contract, and is

not based on when the corresponding delivery obligation was incurred. Thus, under the approach of *Carruthers*, a first advertiser could contract for a number of advertisements to be shown. At some later point in time, a second advertiser could contract for a much larger number of advertisements than the second advertiser actually desires. As *Carruthers* promotes advertisements in priority if they are behind their daily goals, it is possible that the second advertiser will receive exactly the number of slots the second advertiser actually desires, but the first advertiser will receive a much smaller portion of slots than the first advertisers contracted for, even though the first advertiser contracted before the second advertiser. As a result, the first advertiser may perceive such an arrangement to be unfair.

**Several Elements of Claim 1 are not Taught or Suggested by *Carruthers***

Claim 1 features the elements of:

“storing sequence information that indicates a sequence for a plurality of advertisements, wherein each of said plurality of advertisements is associated with corresponding delivery criteria:  
from said subset of advertisements, selecting an advertisement to include in the slot based, at least in part, on relative positions, within said sequence, of the advertisements in said subset,  
wherein each advertisement of said plurality of advertisements has a corresponding delivery obligation, and  
wherein the relative position of advertisements in said sequence corresponds to when the corresponding delivery obligation was incurred”

The portion of *Carruthers* cited by the Office Action to show the above elements (paragraphs 34-35) is discussed above. This portion of *Carruthers* merely teaches the same approach as discussed in the Applicants’ background. Specifically, *Carruthers* teaches that the order in which advertisements are shown is initially based on the calculated goals of each active advertising campaign (paragraph 34), and “if an advertisement gets behind in meeting its [daily] goals, it may be automatically promoted in priority” (paragraph 35). As explained

above, such an approach may result in perceived unfairness by advertisers having advertisements whose delivery is adversely affected by the conduct of subsequent advertisers.

On the other hand, the above-quoted features of Claim 1 require selecting an advertisement to include in a slot based, at least in part, on the relative position of the advertisement, within in a sequence of advertisements, that corresponds to when the corresponding delivery obligation for the advertisements were incurred. In sharp contrast, *Carruthers* lacks any teaching or suggestion of selecting advertisements to include in a slot based, at least in part, on a sequence that corresponds to when the corresponding delivery obligations of the advertisements were incurred.

Indeed, as explained above, *Carruthers* teaches away from this feature by teaching that the order in which advertisements are shown is initially based on the goals of active advertising campaigns, and that order may be subsequently revised based on the daily goals for each active advertising campaign. The daily goals of *Carruthers* are based not on when a delivery obligation was incurred, but how many times an advertisement was shown that day compared to the contracted number of advertisements. Thus, at no time are advertisements selected for inclusion in a slot based on when a delivery obligation was incurred in the approach of *Carruthers*.

The Office Action acknowledges that *Carruthers* prioritizes the queue of advertisements to be shown based on the number of impressions needed to be shown and feedback from the system regarding which ads have been shown, rather than on when the delivery obligation for an advertisement was incurred. In recognition of the deficiencies of *Carruthers*, the Office Action argues (a) *Carruthers* uses a “first-come, first served” approach in Capacity Forecaster 52, and (b) because Capacity Forecaster 52 uses a “first-come, first served” approach in Capacity Forecaster 52, it would have been obvious for

*Carruthers* to use a “first-come, first served” approach in the master list of scheduled ads based upon when the advertisers contracted with the system of *Carruthers*.

The Office Action’s explanation as to why *Carruthers* suggests the features of Claim 1 requires that the actual teachings of *Carruthers* (the “acknowledged teachings”) be ignored in favor of what *Carruthers* might have taught (the “hypothetical teachings”), and the only motivation provided by the Office Action for interpreting *Carruthers* as teaching the hypothetical teachings, instead of the acknowledged teachings, is the Examiner’s belief that:

[*Carruthers*] does favorably treat newcomers by allowing them into the system and at the same time, not letting latecomers into the system where the latecomer’s ad requirements cannot be satisfied without stealing ad opportunities from earlier advertisers, due to the limited expected ad slot inventory. Examiner believes this provides proper motivation to have included a first-come, first-serve policy whereby the queue can include prioritization based upon when the various advertisers agreed to ad contracts.

Thus, the Office Action does not identify any portion of *Carruthers*, or any other cited reference, which suggests that *Carruthers* teaches or suggests the hypothetical teachings, but instead, merely states that it is the Examiner’s belief that the approach *Carruthers* could have included the hypothetical teachings, even though the Office Action acknowledges it did not.

The basis of the Examiner’s belief is that *Carruthers* uses a “first-come, first served” approach in Capacity Forecaster 52. This is not true. If it were to be true, the utility of Capacity Forecaster 52 would be eviscerated. Instead of accepting any advertiser on a first-come, first-serve basis, Capacity Forecaster 52 is designed to predict whether the system will be able to deliver the proposed number and nature of impressions for a proposed advertising campaign prior to accepting the advertising campaign. If Capacity Forecaster 52 did operate on a first-come, first-serve basis, there would be no need for Capacity Forecaster 52 to predict whether the system will be able to deliver the proposed number and nature of

impressions for a proposed advertising campaign, since each advertising campaign would be accepted on a first-come, first-serve basis.

Since Capacity Forecaster 52 does predict whether the system will be able to deliver the proposed number and nature of impressions for a proposed advertising campaign, when a proposed advertising campaign is accepted, *Carruthers* operates under the assumption that the contracted number and nature of impressions for an advertising campaign will actually be able to be delivered. As such, the above-quoted claimed features of Claim 1 are not performed. Instead, Inventory Manager 51 generates a master delivery plan expected to fulfill delivery contracts with advertisers (paragraph 32). Delivery Manager 54 reorders and reprioritizes the master list of scheduled advertisements based upon delivery feedback data and queuing logic/algorithms (paragraph 35).

*Carruthers* teaches away from a motivation of storing sequence information that indicates a sequence for a plurality of advertisements, wherein the relative position of advertisements in the sequence corresponds to when the corresponding delivery obligation was incurred because (a) there would be no need since it has already been determined by Capacity Forecaster 52 that the proposed number and nature of impressions for the advertising campaign should be able to be delivered, and (b) the acknowledging teachings of *Carruthers* are mutual exclusive with the features of Claim 1 because in the acknowledging teachings of *Carruthers*, to the extent that sequence information that indicates a sequence for a plurality of advertisements is stored, the sequence information is based on fulfilling delivery contracts with advertisers, rather than when delivery obligations were incurred.

Consequently, the element of “wherein the relative position of advertisements in said sequence corresponds to when the corresponding delivery obligation was incurred” is not disclosed, taught, or suggested by *Carruthers*. As at least one element of Claim 1 is not

disclosed, taught, or suggested by *Carruthers*, Claim 1 is patentable over the cited art and is in condition for allowance.

**Response to Office Action's Comment Regarding Effectiveness of the Approach of Pending Claims**

The Office Action states:

Applicant's noted disadvantage regarding an inflated number of required ads is not completely eliminated, but rather is eliminated only for those people agreeing to contracts before the inflator agreed to a contract. An inflator still steals ad opportunities from everyone behind the ad inflator (page 6)

Applicants respectfully disagree with the characterization of the Office Action regarding an "inflator" who "steals" ad opportunities. An advertiser is always free to contract for the delivery of as many advertisements as he or she wishes (and hopefully is capable of paying for). An entity contracting with advertisers (an "advertisement deliverer") for the delivery of advertisements would typically be happy to contract for as many advertisements as they may delivery to maximize their profit. Thus, the problem that the pending claims address is not whether a first advertiser may contract with the advertisement deliverer in such a way as to interfere with other advertisers who subsequently contract with the advertisement deliverer, but whether an advertiser may contract for a delivery obligation that causes advertisements of advertisers who contracted earlier, but with more realistic delivery obligations, to cease to be selected for inclusion within content delivered by the advertisement deliverer.

According to the approach of the pending claims, if an advertiser contracts for a number of advertisements that makes it unlikely that other advertisers, who subsequently contract with the advertiser deliverer, will have a substantial portion of the advertisements of

their campaign delivered, all subsequent advertisers can be made aware of the availability of the advertisement deliverer, thereby allowing them to contract, if they so choose, for an amount of advertisements which the advertisement deliverer can actually deliver. However, a subsequent advertiser, who contracted with the advertisement deliverer at a later point in time, cannot adversely affect the delivery of advertisements of an earlier advertiser who entered into a contractual obligation with the advertisement delivery at an earlier point in time.

#### CLAIMS 3-10

Claims 3-10 are dependent claims, each of which depends (directly or indirectly) on Claim 1. Each of Claims 3-10 is therefore allowable for the reasons given above for the claim on which it depends. In addition, each of Claims 3-10 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.



## CONCLUSION

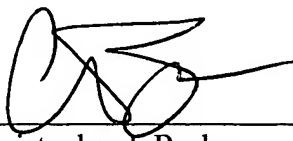
For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

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On February 2, 2006 By

  
Angelica Maloney